

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for forming a glass structure comprising:
providing a glass member with a front surface and a rear surface ~~and a reinforcing member;~~

~~securing~~forming a rigid interlayer on the rear surface of the glass member by applying a resin to the rear surface of the glass member and curing the resin such that the rigid interlayer applies a compressive force to the rear surface of the glass member;

securing a reinforcing structure to the rigid interlayer opposite the rear surface of the glass member, the reinforcing structure formed by applying a resin in a liquid state to ~~the a~~ reinforcing member; and

securing a support member to the reinforcing structure to support the glass structure and to facilitate ~~the~~ mounting of the glass structure.

2. (Cancelled)

3. (Previously Presented) The method of Claim 2, wherein securing the reinforcing structure to the rigid interlayer comprises:

applying the reinforcing structure to the rigid interlayer; and

curing the resin to bond the reinforcing structure to the rigid interlayer.

4. (Original) The method of Claim 3, wherein securing the reinforcing structure to the rigid interlayer and securing the support member to the reinforcing structure are performed substantially simultaneously when the resin is cured.

5. (Original) The method of Claim 3, wherein curing the resin is performed at a predetermined temperature that is greater than or equal to a maximum temperature at which the glass structure will be used.

6. (Original) The method of Claim 1, wherein after providing the glass member, the method includes forming the glass member to a predetermined shape.

7. (Original) The method of Claim 6, wherein the glass member is formed on a vacuum tool.

8. (Previously Presented) The method of Claim 6, wherein the step of securing the rigid interlayer to the glass member comprises:

applying a resin over an area corresponding to a rear surface of the glass member;
and
curing the resin to form the rigid interlayer.

9. (Original) The method of Claim 8, wherein curing the resin is performed at a predetermined temperature that is greater than or equal to a maximum temperature at which the glass structure will be used.

10. (Original) The method of Claim 1, wherein the glass member is a mirror.

11. (Currently Amended) A method for forming a mirror assembly comprising:
providing a mirror having a front surface that is associated with light reflection
and a rear surface;
applying a resin to the rear surface of the mirror to form a rigid interlayer;
~~curing the resin, said resin shrinking as it cures and applying a compressive force~~
~~to the rear surface;~~
~~providing~~securing a reinforcing structure on the rigid interlayer, the reinforcing
structure formed by applying a resin in a liquid state to a reinforcing member; and
~~securing~~curing the resin to secure the rigid interlayer and the reinforcing structure
to the rear surface of the mirror, the reinforcing structure supporting the mirror and
facilitating ~~the mounting of the mirror,~~ and the resin shrinking as it cures to apply a
compressive force to the rear surface.

12. (Original) The method of Claim 11, wherein the compressive force has a
magnitude that is sufficient to drive the whole of the mirror into a state of compression.

13. (Original) The method of Claim 12, wherein the mirror is preformed such that
the front surface of the mirror conforms to a non-flat shape.

14. (Original) The method of Claim 13, wherein the non-flat shape is selected from at least one of: shapes formed at least in part by a spherical radius and parabolic shapes.

15. (Original) The method of Claim 11, wherein the resin is selected from at least one of unsaturated polyesters, bismaleimides, epoxy vinyl esters and epoxies.

16. (Cancelled)

17. (Currently Amended) The method of Claim 11, wherein the reinforcing structure includes ~~an interlayer and~~ a support structure.

18. (Original) The method of Claim 11, wherein the mirror includes a glass panel having a thickness of about 0.001 inch to about 0.4 inch.

19. (Currently Amended) A method for forming a mirror assembly comprising:
providing a glass member having a glass panel with a thickness that is less than about 0.4 inch thick and a reflective material that is associated with a surface of the glass panel to effect light reflection, the glass member having a front surface and a rear surface;

forming the glass member such that the light reflecting surface conforms to a predetermined shape;

applying a resin in a liquid state to a surface of the glass member opposite the light reflecting surface to form a rigid interlayer;

applying a resin in a liquid state to a reinforcing member to form a reinforcing member structure;

securing the reinforcing structure to the rigid interlayer;

and coupling at least one support structure to ~~at least one of the surface of the glass member opposite the light reflecting surface and the resin~~ reinforcing structure;
and

curing the resin such that the ~~resin~~ rigid interlayer, the reinforcing member and the support structure cooperate to ~~form a rigid interlayer that supports~~ support the glass member and ~~facilitates~~ facilitate mounting of the mirror assembly, and

said resin shrinking as it cures and applying a compressive force to the surface of the glass member opposite the light reflecting surface, the compressive force having a magnitude such that the entire cross-sectional thickness of the glass member is maintained in a state of compression.